U.S. ARMY PUBLIC AFFAIRS NEWS RELEASE

# Improved Army Truck Gets OK for Production

GERRY J. GILMORE

WASHINGTON (Army News Service) – The Army has authorized production of an improved version of a tactical truck that was initially fielded to soldiers almost three years ago.

Army Acquisition Executive Paul J. Hoeper gave the Family of Medium Tactical Vehicle truck contractor, Stewart and Stevenson Inc., the go-ahead Sept. 9 to produce an A1, or modified version of the truck, after prototypes successfully completed more than 90,000 miles of extensive testing at Aberdeen Proving Ground, Md.

The improved truck, which like the original model comes in two-and-a-half-ton (M1078A1) and five-ton (M1083A1) variants, features a more powerful diesel engine, a better transmission and brakes, added corrosion protection, computerized engine diagnostics, and beefier drive line engine/transmission/differential connection) components, according to Army officials. The A1 also has almost 40 additional upgrades, such as more durable seating material and cargo tarp, beefier door hinges, and reinforced sections that can be used as footholds to gain access to the cargo area.

"We're going to produce and field a truck with eight times the reliability, availability, and maintainability of the old 'deuce-and-a-half' truck it replaces," said Hoeper during a Sept. 9 press luncheon at the Pentagon. "We've got a truck we're proud to be buying for soldiers, and I think the contractor is proud to be making it for soldiers."

More than 7,600 original-model (AO) FMTV trucks were produced and delivered to units Army-wide since January 1996 as part of a $1.4 billion, five-year contract with the Houston-headquartered contractor, according to officials.

The Army needs 85,000 new trucks to replace its aging fleet, said officials. The new Light Medium Tactical Vehicle (two-and-a-half-ton cargo and van models) and Medium Tactical Vehicle (five-ton cargo, tractor, van, wrecker, tanker, and dump trucks) were designed to replace 30-year-old two-and-a-half-ton (deuce-and-a-half) and five-ton vehicles.

Army officials describe the FMTV program as "revolutionary." While older trucks were mostly custom-designed and engineered to meet military specifications and performance standards unmet by commercial vehicles under acquisition regulations at the time, recent acquisition-rule reform has enabled the Army to use more "off-the-shelf" components and commercial technology for its new trucks.

FMTVs are manufactured according to military performance specifications, but the contractor selects and assembles the commercial-source components, according to Army officials. This more efficient process enables the Army to purchase more trucks at less cost to taxpayers. FMTV trucks have also been engineered to make them easier to airlift during deployments, with some models specifically designed for airdrop.

Officials note that FMTVs have proven to be one of the Army's most durable pieces of equipment, with a 97 percent operational readiness rate. However, the

An FMTV Truck from Stewart & Stevenson's Family of Medium Tactical Vehicles, designed for state-of-the-art durability, reliability, and total mission capability. All truck components, from the engine to the drive train, chassis, cab, and body are designed to withstand the toughest military assignments.
Photo courtesy Stewart & Stevenson

first batch of FMTVs had some "bugs" that needed to be worked out. Last year, the Army sent out a March 10 message, restricting the speed of original-model two-and-a-half-ton FMTVs to 30 mph after three non-fatal accidents involving those models were reported in close succession. That message was later expanded to include five-ton FMTVs.

A total of 11 accidents — all involving no injury or minor injury and involving original-model FMTV trucks — have been reported since fielding, said Army officials.

Army and contractor officials found that the initial model's drive line was susceptible to vertical flexing and vibration when the vehicle was lightly loaded and driven above 50 mph on paved highways for long distances. Resultant vibration-induced stress on U-joints connecting the transmission to the drive shaft caused the drive shaft to break off in three accidents cited, officials said.

Original-model FMTV trucks are now being retrofitted in the field with sturdier U-joints, larger-diameter drive shafts, and a stronger flywheel housing, said Army officials. Retrofits have been completed on trucks in Korea, and Fort Carson, Colo., and the job is 25-percent complete involving a total of 500 vehicles in Hawaii. Work to retrofit 2,600 trucks at Fort Bragg, N.C., [started] in October.

Other FMTV retrofit operations are scheduled at Fort Stewart, Ga.; Fort Benning, Ga.; Fort Campbell, Ky.; Fort Drum, N.Y.; Fort Huachuca, Ariz.; Fort Hood, Texas; and Fort Lewis, Wash.

“The approach we've taken is much like that of recall [campaigns] of commercial [auto] manufacturers,” said Lt. Gen. Paul J. Kern, the military deputy to the Assistant Secretary of the Army for Research and Development.

The new A1 truck features the drive line improvements and other upgrades such as better brakes, a smoother, seven-speed automatic transmission, increased engine size and horsepower, and more, said Kern.

Many FMTV improvements were made according to input from soldiers in the field, said Chief Warrant Officer Christopher Mitchell, a support maintenance officer with U.S. Army Special Operations Command at Fort Bragg. Mitchell, who is Ranger-qualified, was asked to travel to Aberdeen to suggest improvements for the FMTV. Outside the Pentagon after the luncheon, press members were able to inspect a partially upgraded FMTV fresh from testing at Aberdeen with 25,000 miles on its odometer.

Mitchell helped to explain the vehicle to the press. Later, he climbed up into the cab and sat behind the wheel.

"I came up here to tell people about some of the [FMTV] problems which needed to be fixed," said Mitchell. "The modifications, without a doubt, have gone a long way to improve the vehicle."

FMTV Program Manager Col. Robert B. Lees was also on hand to explain the improved truck to the press. Soldiers should start receiving the A1 in March [2000], he said.

Between now and July [2000], said officials, Stewart and Stevenson will produce more than 1,500 A1s — at a cost between $130,000-$320,000 a copy, depending upon the type of truck and configuration — at its Sealy, Texas, plant.

"We addressed the users' issues over the past two months, and [improvements] will be manufactured-in at the plant," said Lees. One of Mitchell's suggestions — a reinforced rear tail light assembly that can be used by soldiers as a foothold to climb up into the cargo area at the rear of the truck — will be implemented.

"It doesn't affect critical mission performance, but it affects soldiers' confidence in the vehicle," said Lees. "It is an item that makes the truck more comfortable to soldiers in the field.

"So, we're also out there listening ... as well as evaluating things from a design standpoint."

**Editor’s Note:** This information is in the public domain at **http://www.dtic.mil/armylink/news.**